

# Tomato Products

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NATIONAL FOOD PROCESSORS ASSOCIATION

**Table 13**  
**TOMATO PASTE TABLE (24-48.5 NTSS)**

Refractometer Reading at 20°C		Specific Gravity 25°/25°C*	lbs Dry Tomato Solids Per Gal at 20°C	Total Solids Vac Drying AOAC Method
Refract Index	Sugar Scale			
1.3707	24.1	1.1126	2.36	25.3
8	24.1	1.1129	2.37	25.6
9	24.2	1.1132	2.37	25.6
10	24.2	1.1135	2.38	25.7
11	24.3	1.1137	2.38	25.7
12	24.4	1.1140	2.39	25.8
13	24.4	1.1143	2.40	25.9
14	24.5	1.1146	2.40	25.9
15	24.5	1.1149	2.41	26.0
16	24.6	1.1151	2.42	26.0
17	24.6	1.1154	2.43	26.1
18	24.7	1.1158	2.44	26.2
19	24.8	1.1160	2.44	26.2
20	24.8	1.1162	2.45	26.3
21	24.9	1.1165	2.45	26.3
22	24.9	1.1168	2.46	26.4
23	25.0	1.1171	2.46	26.4
24	25.1	1.1174	2.47	26.5
25	25.1	1.1176	2.48	26.6
26	25.2	1.1179	2.48	26.6
27	25.2	1.1182	2.49	26.7
28	25.3	1.1185	2.49	26.7
29	25.4	1.1187	2.50	26.8
30	25.4	1.1190	2.51	26.9
31	25.5	1.1193	2.51	26.9
32	25.5	1.1196	2.52	27.0
33	25.6	1.1199	2.52	27.0
34	25.6	1.1201	2.53	27.1
35	25.7	1.1204	2.54	27.2
36	25.8	1.1207	2.54	27.2
37	25.8	1.1210	2.55	27.3
38	25.9	1.1213	2.55	27.3
39	25.9	1.1215	2.56	27.4
40	26.0	1.1218	2.56	27.4
41	26.1	1.1221	2.57	27.5
42	26.1	1.1224	2.58	27.6
43	26.2	1.1226	2.58	27.6
44	26.2	1.1229	2.59	27.7
45	26.3	1.1232	2.59	27.7
46	26.3	1.1235	2.60	27.8
1.3747	26.4	1.1238	2.61	27.9
48	26.5	1.1240	2.61	27.9
49	26.5	1.1243	2.62	28.0
50	26.6	1.1246	2.62	28.0
51	26.6	1.1249	2.63	28.1

For practical purposes, 25°C/25°C is the same at 20°C/20°C.

Table 13 (continued)  
TOMATO PASTE TABLE (24-48.5 NTSS)

Refractometer Reading at 20°C			lbs Dry Tomato Solids Per Gal at 20°C	Total Solids Vac Drying AOAC Method
Refract Index	Sugar Scale	Specific Gravity 25°/25°C*		
53	26.7	1.1251	2.63	28.1
53	26.8	1.1254	2.64	28.2
54	26.8	1.1257	2.65	28.3
55	26.9	1.1260	2.65	28.3
56	26.9	1.1263	2.66	28.4
57	27.0	1.1265	2.67	28.4
58	27.0	1.1268	2.68	28.5
59	27.1	1.1271	2.69	28.6
60	27.1	1.1274	2.69	28.6
61	27.2	1.1276	2.70	28.7
62	27.3	1.1279	2.70	28.7
63	27.3	1.1282	2.71	28.8
64	27.4	1.1285	2.71	28.8
65	27.4	1.1288	2.72	28.9
66	27.5	1.1290	2.72	28.9
67	27.5	1.1293	2.73	29.0
68	27.6	1.1296	2.74	29.1
69	27.7	1.1299	2.74	29.1
70	27.7	1.1301	2.75	29.2
71	27.8	1.1304	2.75	29.2
72	27.8	1.1307	2.76	29.3
73	27.9	1.1310	2.76	29.3
74	27.9	1.1313	2.77	29.4
75	28.0	1.1315	2.78	29.5
76	28.0	1.1318	2.78	29.5
77	28.1	1.1321	2.79	29.6
78	28.2	1.1324	2.79	29.6
79	28.2	1.1327	2.80	29.7
80	28.3	1.1329	2.80	29.7
81	28.3	1.1332	2.81	29.8
82	28.4	1.1335	2.81	29.8
83	28.4	1.1338	2.82	29.9
84	28.5	1.1340	2.83	30.0
85	28.6	1.1343	2.83	30.0
86	28.6	1.1346	2.84	30.1
12787	28.7	1.1349	2.85	30.1
88	28.7	1.1352	2.86	30.2
89	28.8	1.1354	2.86	30.2
90	28.8	1.1357	2.87	30.3
91	28.9	1.1360	2.88	30.4
92	29.0	1.1363	2.88	30.4
93	29.0	1.1365	2.89	30.5
94	29.1	1.1368	2.89	30.5
95	29.1	1.1371	2.90	30.6
96	29.2	1.1374	2.90	30.6

For practical purposes, 25°C/25°C is the same as 20°C/20°C.

Table 13 (continued)  
TOMATO PASTE TABLE (24-48.5 NTSS)

Refractometer Reading at 20°C		Specific Gravity 25°/25°C*	lbs Dry Tomato Solids Per Gal at 20°C	Total Solids Vac Drying AOAC Method
Refract Index	Sugar Scale			
97	29.2	1.1377	2.91	30.7
98	29.3	1.1379	2.92	30.8
99	29.3	1.1382	2.92	30.8
1.3800	29.4	1.1385	2.93	30.9
1	29.5	1.1388	2.93	30.9
2	29.5	1.1390	2.94	31.0
3	29.6	1.1393	2.94	31.0
4	29.6	1.1396	2.95	31.1
5	29.7	1.1399	2.95	31.1
6	29.7	1.1402	2.96	31.2
7	29.8	1.1404	2.96	31.2
8	29.8	1.1407	2.97	31.3
9	29.9	1.1410	2.98	31.3
10	30.0	1.1413	2.99	31.4
11	30.0	1.1416	2.99	31.4
12	30.1	1.1418	3.00	31.5
13	30.1	1.1421	3.00	31.5
14	30.2	1.1424	3.01	31.6
15	30.2	1.1427	3.01	31.6
16	30.3	1.1429	3.02	31.7
17	30.3	1.1432	3.03	31.8
18	30.4	1.1435	3.03	31.8
19	30.4	1.1438	3.04	31.9
20	30.5	1.1441	3.05	32.0
21	30.6	1.1443	3.05	32.1
22	30.6	1.1446	3.06	32.1
23	30.7	1.1449	3.07	32.2
24	30.7	1.1452	3.07	32.2
25	30.8	1.1454	3.08	32.3
26	30.8	1.1457	3.08	32.3
1.3827	30.9	1.1460	3.09	32.4
28	30.9	1.1463	3.10	32.5
29	31.0	1.1466	3.10	32.5
30	31.1	1.1468	3.11	32.6
31	31.1	1.1471	3.12	32.6
32	31.2	1.1474	3.13	32.7
33	31.2	1.1477	3.13	32.7
34	31.3	1.1479	3.14	32.8
35	31.3	1.1482	3.14	32.8
36	31.4	1.1485	3.15	32.9
37	31.4	1.1488	3.16	33.0
38	31.5	1.1491	3.16	33.0
39	31.6	1.1493	3.17	33.1
40	31.6	1.1496	3.17	33.1
41	31.7	1.1499	3.18	33.2

For practical purposes, 25°C/25°C is the same as 20°C/20°C.

**Table 13 (continued)**  
**TOMATO PASTE TABLE (24-48.5 NTSS)**

Refractometer Reading at 20°C				
Refract Index	Sugar Scale	Specific Gravity 25°/25°C*	lbs Dry Tomato Solids Per Gal at 20°C	Total Solids Vac Drying AOAC Method
42	31.7	1.1502	3.18	33.2
43	31.8	1.1505	3.19	33.3
44	31.8	1.1507	3.19	33.3
45	31.9	1.1510	3.20	33.4
46	31.9	1.1513	3.21	33.5
47	32.0	1.1516	3.21	33.5
48	32.1	1.1518	3.22	33.6
49	32.1	1.1521	3.23	33.7
50	32.2	1.1524	3.24	33.8
51	32.2	1.1527	3.25	33.8
52	32.3	1.1530	3.25	33.9
53	32.3	1.1532	3.26	33.9
55	32.4	1.1538	3.28	34.1
56	32.5	1.1541	3.28	34.1
57	32.5	1.1543	3.29	34.2
58	32.6	1.1546	3.29	34.2
59	32.6	1.1549	3.30	34.3
60	32.7	1.1552	3.30	34.3
61	32.7	1.1555	3.31	34.4
62	32.8	1.1557	3.31	34.4
63	32.8	1.1560	3.32	34.5
64	32.9	1.1563	3.32	34.5
65	33.0	1.1566	3.33	34.6
1.3866	33.0	1.1568	3.33	34.6
67	33.1	1.1571	3.34	34.7
68	33.1	1.1574	3.35	34.7
69	33.2	1.1577	3.36	34.8
70	33.3	1.1580	3.37	34.9
71	33.3	1.1582	3.37	34.9
72	33.4	1.1585	3.38	35.0
74	33.5	1.1590	3.39	35.1
76	33.6	1.1595	3.40	35.2
78	33.7	1.1600	3.41	35.3
80	33.8	1.1605	3.42	35.4
82	33.9	1.1610	3.43	35.5
84	34.0	1.1615	3.44	35.6
86	34.1	1.1620	3.45	35.7
87	34.2	1.1625	3.46	35.8
88	34.3	1.1629	3.47	35.8
90	34.4	1.1634	3.48	35.9
92	34.5	1.1639	3.49	36.0
94	34.6	1.1644	3.50	36.1
96	34.7	1.1649	3.51	36.2
98	34.8	1.1654	3.52	36.3
1.3900	34.9	1.1659	3.53	36.4

For practical purposes, 25°C/25°C is the same as 20°C/20°C.

Table 13 (continued)  
TOMATO PASTE TABLE (24-48.5 NTSS)

Refractometer Reading at 20°C			lbs Dry Tomato Solids Per Gal at 15 20°C	Total Solids Vac Drying AOAC Method
Refract Index	Sugar Scale	Specific Gravity 25°/25°C*		
2	35.0	1.1664	3.54	36.3
3	35.1	1.1668	3.55	36.4
4	35.2	1.1672	3.56	36.5
6	35.3	1.1677	3.57	36.7
8	35.4	1.1682	3.58	36.8
10	35.5	1.1687	3.59	36.9
12	35.6	1.1692	3.60	37.0
14	35.7	1.1697	3.61	37.1
16	35.8	1.1702	3.63	37.2
18	35.9	1.1707	3.64	37.3
20	36.0	1.1712	3.65	37.4
22	36.1	1.1718	3.66	37.5
24	36.2	1.1723	3.67	37.6
26	36.3	1.1728	3.68	37.7
27	36.4	1.1733	3.69	37.8
29	36.5	1.1738	3.71	37.9
31	36.6	1.1743	3.72	38.0
33	36.7	1.1748	3.73	38.1
1.3915	36.8	1.1753	3.74	38.1
36	36.9	1.1758	3.75	38.2
38	37.0	1.1763	3.76	38.3
40	37.1	1.1768	3.77	38.4
42	37.2	1.1773	3.78	38.5
44	37.3	1.1778	3.79	38.6
46	37.4	1.1783	3.80	38.7
48	37.5	1.1788	3.81	38.8
50	37.6	1.1793	3.82	38.9
52	37.7	1.1798	3.83	39.0
54	37.8	1.1803	3.84	39.1
56	37.9	1.1808	3.86	39.2
57	38.0	1.1813	3.87	39.3
59	38.1	1.1818	3.88	39.4
61	38.2	1.1823	3.89	39.5
63	38.3	1.1828	3.90	39.6
65	38.4	1.1834	3.91	39.7
67	38.5	1.1839	3.93	39.8
69	38.6	1.1844	3.94	39.9
71	38.7	1.1850	3.95	40.0
73	38.8	1.1855	3.96	40.1
75	38.9	1.1860	3.97	40.2
77	39.0	1.1866	3.98	40.3
79	39.1	1.1871	4.00	40.4
81	39.2	1.1876	4.01	40.5
83	39.3	1.1881	4.02	40.6
85	39.4	1.1886	4.03	40.7

For practical purposes, 25°C/25°C is the same at 20°C/20°C.

Table 13 (continued)  
TOMATO PASTE TABLE (24-48.5 NTSS)

Refractometer Reading at 20°C		Specific Gravity 25°/25°C*	lbs Dry Tomato Solids Per Gal at 28°C	Total Solids Vac Drying AOAC Method
Refract Index	Sugar Scale			
87	39.5	1.1891	4.04	40.8
89	39.6	1.1894	4.05	40.9
91	39.7	1.1901	4.06	41.0
93	39.8	1.1907	4.08	41.1
95	39.9	1.1912	4.09	41.2
96	40.0	1.1917	4.10	41.2
98	40.1	1.1922	4.11	41.3
1001	40.2	1.1927	4.12	41.4
2	40.3	1.1932	4.13	41.5
4	40.4	1.1938	4.14	41.6
6	40.5	1.1943	4.15	41.7
9	40.6	1.1948	4.16	41.8
11	40.7	1.1954	4.17	41.9
14013	40.8	1.1959	4.19	42.0
14	40.9	1.1964	4.20	42.1
16	41.0	1.1970	4.21	42.2
18	41.1	1.1975	4.22	42.3
20	41.2	1.1980	4.23	42.4
22	41.3	1.1986	4.24	42.5
24	41.4	1.1991	4.26	42.6
26	41.5	1.1996	4.27	42.7
28	41.6	1.2002	4.28	42.8
30	41.7	1.2007	4.29	42.9
32	41.8	1.2013	4.30	43.0
34	41.9	1.2018	4.31	43.1
36	42.0	1.2023	4.33	43.2
38	42.1	1.2029	4.34	43.3
40	42.2	1.2034	4.35	43.4
42	42.3	1.2039	4.36	43.5
44	42.4	1.2045	4.37	43.6
46	42.5	1.2050	4.39	43.7
48	42.6	1.2055	4.40	43.8
50	42.7	1.2061	4.41	43.9
52	42.8	1.2066	4.42	44.0
54	42.9	1.2071	4.44	44.2
56	43.0	1.2077	4.46	44.3
58	43.1	1.2082	4.47	44.4
60	43.2	1.2087	4.48	44.5
62	43.3	1.2093	4.49	44.6
64	43.4	1.2098	4.50	44.7
66	43.5	1.2103	4.52	44.8
68	43.6	1.2109	4.53	44.9
70	43.7	1.2114	4.54	45.0
72	43.8	1.2119	4.55	45.1
74	43.9	1.2125	4.57	45.2

For practical purposes, 25°C/25°C is the same at 20°C/20°C.

Table 13 (continued)  
TOMATO PASTE TABLE (24-48.5 NTSS)

Refractometer Reading at 20°C		Specific Gravity 25°/25°C*	lbs Dry Tomato Solids Per Gal at 20°C	Total Solids Vac Drying AOAC Method
Refract Index	Sugar Scale			
75	44.0	1.2130	4.58	45.3
78	44.1	1.2135	4.59	45.4
80	44.2	1.2141	4.60	45.5
82	44.3	1.2146	4.61	45.6
84	44.4	1.2151	4.63	45.7
86	44.5	1.2157	4.64	45.8
88	44.6	1.2162	4.65	45.9
90	44.7	1.2167	4.66	46.0
1.4092	44.8	1.2173	4.68	46.2
94	44.9	1.2178	4.70	46.3
96	45.0	1.2183	4.71	46.4
98	45.1	1.2189	4.72	46.5
1.4100	45.2	1.2194	4.73	46.6
2	45.3	1.2199	4.75	46.7
4	45.4	1.2205	4.76	46.8
6	45.5	1.2210	4.77	46.9
8	45.6	1.2216	4.78	47.0
10	45.7	1.2221	4.79	47.1
12	45.8	1.2226	4.81	47.2
14	45.9	1.2232	4.82	47.3
17	46.0	1.2238	4.83	47.4
19	46.1	1.2244	4.84	47.5
21	46.2	1.2250	4.86	47.6
23	46.3	1.2256	4.87	47.7
25	46.4	1.2261	4.88	47.8
27	46.5	1.2266	4.89	47.9
29	46.6	1.2272	4.91	48.0
31	46.7	1.2277	4.93	48.2
33	46.8	1.2282	4.94	48.3
35	46.9	1.2288	4.95	48.4
37	47.0	1.2293	4.97	48.5
39	47.1	1.2298	4.98	48.6
41	47.2	1.2304	4.99	48.7
43	47.3	1.2309	5.00	48.8
45	47.4	1.2314	5.02	48.9
47	47.5	1.2320	5.03	49.0
49	47.6	1.2325	5.04	49.1
51	47.7	1.2330	5.05	49.2
53	47.8	1.2336	5.07	49.3
55	47.9	1.2341	5.08	49.4
58	48.0	1.2347	5.09	49.5
60	48.1	1.2353	5.10	49.6
62	48.2	1.2359	5.12	49.7
64	48.3	1.2365	5.13	49.8
66	48.4	1.2370	5.14	49.9
68	48.5	1.2376	5.15	50.0

For practical purposes 25°C/25°C is the same as 20°C/20°C.